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### ***What are Water Quality Standards?***

- Defines water quality goals of a water body
- This is accomplished by:
  - Designating the use or uses to be made of the water (aquatic, recreational, etc.)
  - Setting criteria necessary to protect the uses
  - Preventing degradation of water quality

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### ***What are designated uses?***

40CFR131.3

*“Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.”

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## Iowa Designated Uses

Class A uses	Recreation
Class B uses	Aquatic Life
Class C use	Drinking Water Supply
Class HH use	Human Health
Class HQR/HQ use	High Quality

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## Iowa Aquatic Life Uses

Class B(WW1)	Large streams
B(WW2)	Small streams
B(WW3)	Intermittent w/pools
B(LW)	Lakes & wetlands
B(CW1)	Cold water streams
B(CW2)	Cold water headwaters
General Use	Intermittent/Ephemeral streams

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## Iowa Aquatic Life Uses

### B(WW1)

"Waters in which temperature, flow and other **habitat** characteristics are suitable to **maintain** warm water **game fish populations** along with a **resident aquatic community** that includes a variety of native fish and invertebrate species. These waters generally include border rivers, **large interior** rivers, and the lower segments of medium-size tributary streams." 567 IAC 61.3(1)

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## Iowa Aquatic Life Uses

Class B(WW2)

"Waters in which flow or other **physical characteristics** are capable of supporting a **resident aquatic community** that includes a variety of native **non-game fish** and invertebrate species. The flow and other physical characteristics **limit** the maintenance of warm water **game fish populations**. These waters generally consist of **small** perennially flowing streams." 567 IAC 61.3(1)

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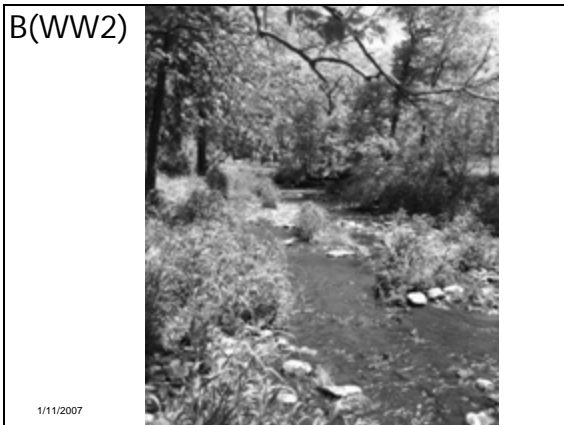
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## Iowa Aquatic Life Uses

B(WW3)

"Waters in which **flow persists** during periods when antecedent **soil moisture** and **ground water** discharge levels are **adequate**; however, aquatic habitat typically consists of **non-flowing pools during dry periods** of the year. These waters generally include small streams of **marginally perennial aquatic habitat** status. Such waters support a **limited** variety of **native fish and invertebrate** species that are adapted to survive in relatively **harsh aquatic conditions**." 567 IAC 61.3(1)

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## Iowa Aquatic Life Uses

### General Uses

"These are **intermittent** watercourses and those watercourses which typically flow only for short periods of time following precipitation and whose channels are **normally above the water table**. These waters **do not support** a viable aquatic community during low flow and do not maintain pooled conditions during periods of no flow."

567 IAC 61.3(1)

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Unnamed Tributary  
near Cumming

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Broadhorn Creek upper reaches near Truro

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Unnamed  
Tributary  
Downstream  
of Davis City  
WWTP

541-1a  
UT  
Dry Bed  
up

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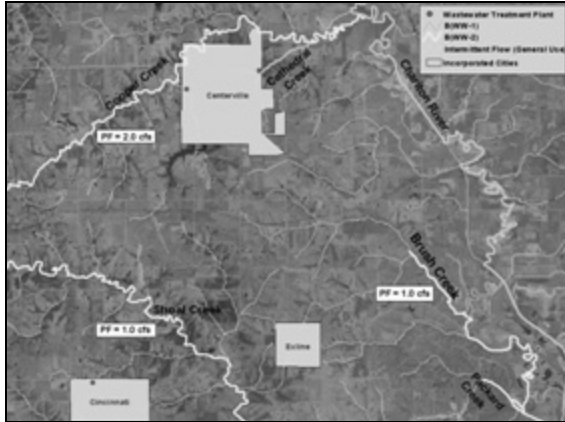
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## Brief History

- Old Aquatic Life Use Designations
  - B(WW) = Significant Resource Warm Water
  - B(LR) = Limited Resource Warm Water
- WQS Rule Changes effective 3/22/06
  - B(WW) changed to B(WW-1)
  - B(LR) changed to B(WW-2)
- Numerical Criteria Changes effective 3/22/06
  - B(WW) Criteria = B(WW-1) Criteria
  - B(LR) Criteria = B(WW-2) & B(WW-3) Criteria
- EPA Approval Issues
  - Changes were name revisions and use clarification
  - EPA feels these are new designated uses
  - Urgent need for criteria review

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		Use Designations							
Parameter		B(CW1)	B(CW2)	B(WW-1)	B(WW-2)	B(WW-3)	B(LW)	C	HH
Alachlor	MCL	—	—	—	—	—	—	2	—
Aluminum	Chronic	87	—	388	773	773	748	—	—
	Acute	1106	—	4539	9035	9035	983	—	—
Antimony	Human Health — F & W	—	—	—	—	—	—	—	14 <sup>(7)</sup>
Arsenic (III)	Chronic	200	—	200	1000	1000	200	—	—
	Acute	360	—	360	1800	1800	360	—	—
	Human Health — Fish	—	—	—	—	—	—	—	50 <sup>(1)</sup>
	Human Health — F & W	—	—	—	—	—	—	—	.18 <sup>(2)</sup>

Criteria being discussed

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### **The New WQS**

- All non-designated perennial streams and intermittent streams with perennial pools will be designated as Class A1, B(WW-1) i.e. *"fishable/swimmable"*
- This is approximately 14,000 additional stream miles

(12,000 miles previously designated out of 26,000 miles of perennial streams)

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Mississippi River = A1, B(WW-1)



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Unnamed Tributary south of Tiffin  
WWTP = A1, B(WW-1)



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